

REMARKS

In the Office Action, claims 1-30 were rejected. By the present Response, claims 1, 3, 5, 6, 10, 13, 15, 16, 20, 26, 28 and 30 are amended. Furthermore, claims 2, 4, 11, 12, 14, 22, 24, 25 and 29 are canceled and new claims 31-37 are added. Upon entry of the amendments, cancellations and additions, claims 1, 3, 5-10, 13, 15-21, 23, 26-28 and 30-37 will be pending in the present patent application. Reconsideration and allowance of all pending claims are requested.

Objections to the Drawings

The Examiner objected to the drawings in several respects. Each of the Examiner's objections are addressed below.

First, the Examiner states,

The drawings must show every feature of the invention specified in the claims. Therefore, "the manual bypass switch comprising an auxiliary switch connected in series with the bypass contactor" must be shown or the feature(s) canceled from the claim(s).

Applicants submit that these features are shown in Figs. 3-5 as described in the Specification. The Specification states, "First auxiliary contacts 72 and second auxiliary contacts 74 are electrically connected in series with the bypass contactor 70." Pg. 8, lines 8-10. As can be seen in Figs. 3-5 auxiliary contacts 72 and 74 are in series with the bypass contactor 70. Therefore, the claims are supported by the disclosure, both textually in the Specification and visually in Figs. 3-5.

Second, the Examiner objected to Figs. 3-5 for not showing reference sign 16 as described on page 7 of the Specification. Applicants have amended the pertinent paragraph of page 7 of the Specification to remove any mention of a reference sign "16" in Figs. 3-5.

Third, the Examiner objected to reference characters "16" and "46" stating they "have both been used to designate variable frequency drive." However, this is not the case. A careful reading of the Specification reveals that the reference character "16" is used *exclusively* to describe the "variable drive unit" whereas the reference character "46" is used *exclusively* to describe the "variable drive." To clarify the distinction further, Fig. 2 shows that the variable drive 46 is contained within the physical confines of the variable drive unit 16. The variable drive 46 being the main component of the variable drive unit 16. The Specification is consistent in this regard. The one point where confusion may have arisen is on page 7 of the originally filed application where reference number "16" is referred to in Figs. 3-5. However, by the above amendments any confusion should be dispensed on this point.

Fourth, the Examiner objected to reference numeral 24 in Figs. 3-5, stating that it is unclear as to what it is pointing to. In order to remove further confusion, Applicants have removed the reference numeral 24 from all discussion pertaining to Figs. 3-5 by the above amendments.

Fifth, the Examiner objected to Fig. 2 stating that it is unclear as to what 52 and 54 are pointing to and that "the labels need to be enclosed in boxes and have a pointer pointing to what the labels are referring to." With respect to the labels, Fig. 2 has been amended and a new Fig. 2 has been submitted wherein the labels have been removed.

With respect to reference numerals 52 and 54, the Specification describes these as being "a first set of contacts 52" and "a second set of contacts 54" respectively. Page 6, line 15. Looking to Fig. 2, the reference numeral 52 is proximate to a set of contacts and has an arrow pointing to an area between the two contacts. Likewise, reference numeral 54 is in close proximity to a set of contacts and has an arrow pointing to an area between the two contacts. It should be clear that numerals 52 and 54 are respectively refer to the set of contacts to which they are most proximate and furthermore to the set of contacts to

which the arrows point. Applicants, therefore submit that the reference numerals 52 and 54 indicate with sufficient clarity what they are pointing to.

For the above reasons, and in light of amendments, applicants respectfully traverse Examiner's objections to the drawings and request removal of the objections.

Rejections Under 35 U.S.C. § 112

The Examiner rejected claims 5, 6, and 8 under 35 U.S.C § 112. Specifically, the Examiner rejected claim 6 for failing to comply with the enablement requirement; claim 5 and 8 for lacking antecedent basis; and claim 8 also for being unclear.

The Examiner rejects claim 6 as failing to comply with the enablement requirement. Specifically, the Examiner states, "It is unclear how the bypass switch can open the fourth contact being that the claim states that the fourth contact is already open." Applicants have amended claim 6 for the purposes of clarification and to eliminate the apparent redundancy. In light of the amendments, Applicants request withdrawal of the rejection of claim 6 for failing to comply with the enablement requirement.

The Examiner also rejected claims 5 and 8 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards are the invention. With regards to claim 5 the Examiner points to a lack of antecedent basis for "the manual bypass switch" and "the at least one third contact." Claim 5 has been amended to correct this antecedent basis problem. Claim 8 also was cited as having a lack of antecedent basis for "the at least one third contact." Claim 8 has also been amended to correct this antecedent basis problem. Thus, Applicants request withdrawal of the rejection of claims 6 and 8 for lack of antecedent basis.

The Examiner also rejected claim 8 for being unclear as to “if the terminal is coupled to the motor or if the conductor is coupled to the motor.” The claim should be interpreted according to its plain language in light of the Specification. The Specification discusses the terminal 45 while referring to Fig. 2. With respect to coupling the motor to the system disclosed, the Specification states plainly and simply, “Conductors 20 are used to electrically couple the motor controller 14 to the motor 12.” Page 3, lines 28-29. Claim 8 should be abundantly clear when read in light of the Specification and with the current amendments.

Thus, Applicants respectfully request withdrawal of the rejections of claims 5, 6 and 8 under § 112.

Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 1-30 as being anticipated under 35 U.S.C. § 102. Specifically, Examiner rejected claims 1-5, 7-9, 20, 28 and 29 as being anticipated by Owen (U.S. Patent No. 5,130,628); claims 1-3, 7-10 and 17-30 as being anticipated by Glennon (U.S. Patent No. 5,008,801); and claims 1-30 as being anticipated by Raad (U.S. Patent No. 5,097,195). Applicant respectfully traverses these rejections.

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under section 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention “*in as complete*

detail as contained in the ... claim” to support a *prima facie* case of anticipation.

Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

The present application distinguishes itself from the prior art in several respects as will be discussed below. With particular respect to the Owen, Glennon and Raad references, elements of the amended claims are clearly absent from the cited references. For example, none of the cited references discloses contacts in the bypass line, let alone contacts in the bypass line that are actuated by a bypass relay.

Claim 1 and its dependent claims.

With respect to claim 1, the Examiner cited all three references as anticipatory. Claim 1 as amended by this response recites a “bypass relay having a relay coil and a third set of contacts, wherein the third set of contacts is electrically coupled in parallel with the first set of contact and the second set of contact.” Additionally, claim 1 as amended recites “a bypass switch”... “being configured to energize the relay coil and thereby close the third set of contacts...”

No such structure is disclosed in any of the cited references. Specifically, the Owen reference does disclose a bypass. However, this bypass route is not electrically closed by the actuation of a relay. Indeed, there is no indication of any relay making up any part of the Owen device. The by-pass motor control 48 of Owen is directly connected to the switch 50 and there are no additional sets of contacts required to close the circuit through the bypass route. As such, the Owen reference does not disclose every element of claim 1.

Turning to the Glennon reference, here too, there are also no contacts in a bypass route. The examiner points to first (51) and second (52) sets of contacts. However these are functionally different from the first and second sets of contacts of claim 1. Whereas the first and second sets of contacts of claim 1 serve only to connect a variable frequency drive or to electrically isolate a variable frequency drive, the first and second sets of contacts in the Glennon reference connect the variable frequency drive and also connect to the bypass route. Therefore, the Glennon reference does not disclose every element of claim 1.

Finally, the Raad reference also does not disclose any contacts in the bypass parallel to the first and second sets of contacts. Thus, as to claim 1 and claims depending therefrom, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 102.

Claim 10 and its dependent claims.

With respect to claim 10, the Examiner cited to Glennon and Raad as anticipatory. Claim 10 as amended by this response recites, *inter alia*, “a manual switch and a bypass relay; the bypass relay having at least one set of contacts electrically connected in parallel with the variable frequency drive and electrically connected in series between the external power source and the motor...”

As discussed above, neither the Glennon, nor the Raad reference disclose elements of a bypass relay and a set of contacts connected in parallel with a variable frequency drive. As such, Applicants respectfully request withdrawal of the rejections of claim 10 and the claims dependent therefrom.

Claim 20 and its dependent claims.

With respect to claim 20, the Examiner again cited to all three reference as anticipatory. Claim 20 as amended by this response recites, *inter alia*, “a bypass relay

electrically in parallel with the motor drive” and a manual bypass switch “operable to electrically isolate the motor drive from the power source and from the motor, and to close the bypass relay...”

As discussed above, none of the references disclose a relay in the bypass. Therefore, none of the cited references anticipate claim 20 of the present application because they do not disclose every element. Applicants respectfully request withdrawal of the rejection of claim 20 and all claims dependent therefrom.

Claim 28 and its dependent claims.

With respect to claim 28 and claims dependent therefrom, the Examiner again cited to all three references as anticipatory. Claim 28 as amended by this response recites, *inter alia*, “positioning the manually-operated switch in a second position to uncouple the variable frequency drive from the power source and the motor and *to close a relay* to couple the power source directly to the motor.” (emphasis added).

With respect to the Owen reference, there is no actuation of a relay by positioning a switch in a certain position. As discussed above, there is no disclosure of a relay in the bypass in the Owen reference. Even more particularly there is no relay that is closed by the positioning of a manual switch. Therefore, the Owen reference does not disclose every element and cannot anticipate claim 28.

With respect to the Glennon reference, there is no disclosure of a manual switch uncoupling a variable frequency drive from a circuit and simultaneously closing a relay to directly connect the power source to the motor. As such, the Glennon reference cannot anticipate claim 28.

Similar to the Owen and Glennon references, the Raad reference does not disclose the closure of a relay to couple the power source directly to the motor when a manual switch is moved to a second position. Therefore, Raad does not disclose every element of claim 28 and cannot anticipate claim 28.

Applicants respectfully request withdrawal of the rejection of claim 28 and claim 30, which depends therefrom.

New Claims

By the present Response, new claims 31-37 are added. The new claims include two new independent claims 31 and 37. The claims relate to systems similar to those outlined in the preceding claims. Claim 31 recites a motor control system that includes a variable frequency drive, a bypass switch, and a bypass relay. Claim 37 recites a system that includes similar elements, but that is specifically adapted to open a relay used to bypass a motor drive before the motor drive is re-coupled to a power source into a motor.


The new claims are believed to be patentable for the same reasons as the foregoing claims discussed above. Accordingly, their consideration and allowance are requested.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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Amendments to the Drawings

Revised Fig. 2 is illustrated in a new drawing sheet attached to this Amendment and Response.